

ABSTRACT

There is provided a simplified loading device in which a permanent magnet is arranged between a moving element and a fixed element for holding the moving element, a magnetic fluid is disposed in a gap developed at some midpoint in a magnetic circuit in which the magnetic flux of the permanent magnet passes through the moving element, and a shearing force of the magnetic fluid produced by the magnetic flux of the permanent magnet is exerted on the moving element as a loading force.

Thereby, a higher loading force can be generated and the device can be made smaller in size than in the case of the conventional friction or hysteresis brake.